Digital Scholarly Editions as Interfaces

Between innovation and conservation

The narrow path of UI design for the DSE

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The starting point: Edition Visualization Technology v.1

Digital Vercelli Book

Codice Pelavicino Digitale

Lettere di Cise De Gresy
Making EVT a general purpose tool

• New feature requests from other projects
• Natural evolution path: adding support for critical editions
• Problem no. 1: underlying framework less expandable and flexible than we thought
• Problem no. 2: the UI had to be re-designed to accommodate critical edition features
  • Requiring flexibility and expandability
Preparation phase

• But before doing the UI redesign we did a thorough state of the art survey.
Preparation phase (2)
State of the art survey – Results

- Conservatism in first DSEs
- Experiments in new UI paradigms
- Innovation/Experimentation positive and necessary, but entails problems with current DSEs
- Was the initial conservatism completely negative? Or can we learn a lesson from it?
EVT 1 - Before the refactoring

- Two main units:
  - EVT Builder: chain of XSLT 2.0 transformations
  - EVT Viewer: web application for the visualization into a browser of the results of the transformations and the interaction with them
EVT 2.0 - After the refactoring

- MVC (Model View Controller) approach
- Data are saved in a JSON model organized in a way that allows a very quick access to the information needed.
- No more XSLT transformations.
- Direct parsing of the XML.
EVT 2.0 - Designing the GUI

• Requirements analysis (features and functionalities)
• Modeling of every single component, highlighting their unique characteristics and modalities of mutual interaction

• Components
  • the critical text
  • the critical apparatus
  • the list of variants
  • the witnesses …

• Functionalities
  • visualization of textual variation
  • critical apparatus dynamism
  • witnesses collation
  • filter of variants …
EVT 2.0 - The critical apparatus

• To offer the scholar what he/she is used to see in a critical edition (lemma + significant variants + sigla of witness(es))

• Fully exploit of the potentialities of the electronic medium
  • better access to content usually included in a traditional edition
  • possibility to consult what is usually excluded (e.g. orthographic variants)
EVT 2.0 - The critical apparatus (2)

HOW / WHERE TO VISUALIZE IT?
EVT 2.0 - The critical apparatus (3)

SOLUTION 1 - *Popup inline*

- Suitable for very short content
- Limited size
- It covers the text
- Difficult placement and management in fluid GUI
EVT 2.0 - The critical apparatus (4)

SOLUTION 2 - Progressive opening of columns

✓ The logic function of the placement of the elements remains always clear

✗ Decrease of the available space where to place other elements

✗ General confusion in the interaction with the single variant reading
EVT 2.0 - The critical apparatus (5)

SOLUTION 3 - *Inline panel with internal tabs*

- ✓ Text is not covered
- ✓ No additional frames
- ✓ Virtual space quite large
- ✓ Clear distinction between traditional apparatus and other information
- ✓ Rapid access to additional information (critical notes, orthographic variants, …)
EVT 2.0 - The critical apparatus (5)

Liber I
CAPUT 1
Magnus es, domine, et laudabilis vale: magna
magna A] laudabilis C

This apparatus entry is an example using "rdgGrp" to group together variants. Here we have two groups, one presenting only spelling mistakes on the same reading as the lemma, while the second group has a different reading (with a spelling mistake for witness D).

virtus tua, et sapientiae tuae non est numeros. et laudare te vult homo, aliqua portio creaturaræ tuae • et homo circumferens mortalitem • suam, circumferens testimonium peccati sui et testimonium, quia superbis resistis: et tamen laudare te vult homo, aliqua • portio creaturaræ tuae. Tu excitam, ut laudare te delectet, quia fecisti nos ad te et inquietum est cor nostrum, donec requiescat in te. Da mihi •, domine, scire et intellegere, uestum sit prius invocare te an laudare te, et scire te prius sit an invocare te. sed quis te invocat nesciens te? Alid enim pro alio • potest invocare nesciens. An potius invocaris •, ut sciaris? Quomodo

autem invocabunt, in quem non crediderunt? Aut quomodo credent sine prædicante? • Et laudabant dominum qui requirunt eum. Quaerentes enim inventum eum et invententes laudabant • eum. Quaeram te, domine, invocabas te, et invocem te credens in te: prædicatus enim es nobis. Invocat te, domine,
EVT 2.0 - The witnesses collation view

- Scalability problem with many witnesses to compare
  - It is impossible to visualize everything at the same time, even on the screen.

MAIN GOAL:
allow the visualization of as many witnesses as possible, always keeping a neat and clean interface.
EVT 2.0 - The witnesses collation view (2)

INITIAL SOLUTIONS

Difficult browsing of the witnesses
EVT 2.0 - The witnesses collation view (3)

FINAL SOLUTION
EVT 2.0 - The witnesses collation view (4)

FINAL SOLUTION - Responsiveness
EVT 2.0 - The witnesses collation view (5)
EVT 2 - Main features

Heat map

- Intensity of background color adjusted according to the number of significant variation recorded for the readings.
EVT 2 - Main features (2)

Readings filter

- Select the typologies of readings to be highlighted in the text
- Possible selection values retrieved directly from the encoded file and possibly from some configuration values

```
possibleLemmaFilters : "resp, cert",
possibleVariantFilters : "type, cause, hand",
```

```html
<span class="reading_text" ng-class="'invisible':!vm.fitFilters()" />
```
EVT 2 - Main features (3)

**Bookmark**

- Direct reference to a particular view or section of text

```
#/collation
d = doc_1
e = critical
ws = A@1r,B@2v
app = a001
```

**View**: witnesses collation

**Current document**: doc_1

**Current edition level**: critical

**Witnesses visualized**: #A p.1r, #B p.2v

**Critical entry selected**: a001
Conclusion

• Choosing the reasonable compromise:
  • Sometimes “intuitive” really means “familiar”
• Future developments
  • Traditional critical apparatus layout as an option
  • Porting of EVT 1 features into EVT 2
  • Connecting all variant readings to the corresponding images: reliability as “you can see for yourself”

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